ATION DISCLOSURE STATEME TRANSMITTAL OF INFOR (Under 37 CFR 1.97(b) or 1.97(c))

Docket No. A0000428-01-CFP

cation Of: WILLIAM GLEN HARTER, ET AL Filing Date Examiner Group Art Unit February 13, 2002 Unknown 1645 Title: FUSED PYRIMIDINONE MATRIX METALLOPROTEINASE INHIBITORS TECH CENTER 1600 2002 THE WITH Address to: **Assistant Commissioner for Patents** Washington, D.C. 20231 37 CFR 1.97(b) 1.

The Information Disclosure Statement submitted herewith is being filed within three months of of a national application other than a continued prosecution application under 37 CFR 1.53(d); within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; before the mailing of a first Office Action on the merits, or before the mailing of a first Office Action after the filing of a request for continued examination under 37 CFR 1.114. 37 CFR 1.97(c)

\sqcup	The Information Disclosure Statement submitted herewith is being filed after the period specified in 37
	CFR 1.97(b), provided that the Information Disclosure Statement is filed before the mailing date of a
	Final Action under 37 CFR 1.113, a Notice of Allowance under 37 CFR 1.311, or an Action that
	otherwise closes prosecution in the application, and is accompanied by one of:

☐ the statement specified in 37 CFR 1.97(e);

OR

☐ the fee set forth in 37 CFR 1.17(p).

No References Recod.

	F INFOR ATION DISCLO Inder 37 CFR 1.97(b) or 1.97	1	Docket No. A0000428-01-CFP					
In Re Application: WILLIAM GLEN HARTER, ET AL JUN 1 0 2002 5								
Serial No.	Filing Date	MENSANATION	Group Art Unit					
10/075,073	February 13, 2002	Unknown	1645					
FUSED PYRIMIDINONE MATRIX METALLOPROTEINASE INHIBITORS Payment of Fee (Only complete if Applicant elects to pay the fee set forth in 37 CFR 1.17(p))								
	•	ment of Fee	THE TOP OF					
(Only complete if Applicant elects to pay the fee set forth in 37 CFR 1.17(p)) ☐ A check in the amount of is attached. ☐ The Assistant Commissioner is hereby authorized to charge and credit Deposit Account No. 23-0455 as described below. A duplicate copy of this sheet is enclosed. ☐ Charge the amount of ☐ Credit any overpayment. ☐ Charge any additional fee required. ☐ Charge any additional fee required. ☐ Certificate of Transmission by Facsimile* ☐ Certify that this document and authorization to charge deposit account is being facsimile transmitted to the United States ☐ I certify that this document and fee is being deposited ☐ May 31, 2002 with the U.S. Postal Service ☐ as first class mail under 37 C.F.R. 1.8 and is addressed to the Assistant Commissioner for Patents,								
(Date)		Washington, D.C. 20231. Nancy D Dev	nbach					
	Signature	Signature of Person M	lailing Correspondence					
		Nancy Dernbach	M. The Continue					
	lame of Person Signing Certificate	Typed or Printed Name of Pe	son maning Certificate					
*This certificate may only be used if paying by deposit account. Dated: May 31, 2002								
Claude F. Purchase, Jr.								
Registration No. 47,871 Warner-Lambert Compan								
Patent Department	·J							
2800 Plymouth Road								
Ann Arbor, MI 48105								
Tel. (734) 622-1692 Fax (734) 622-1553								
CC:								



PTO/SB/08A (08-00)
Approver use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 6

Complete if Known-					
Application Number	10/075,073				
Filing Date February 13, 2002					
First Named Inventor William Glen Harter, et al					
Group Art Unit	-1645 1624				
Examiner Name	Unknown				
Attorney Docket Number	A0000428-01-CFP				

			U.S. PATENT DOCU	IMENTS	
Examiner Initials*	Cite No.1	U.S. Patent Document Kind Code² (If known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		5,948,780	Peterson, Jr., et al	09/07/1999	. 0
		6,008,243	Bender, et al	12/28/1999	7 7
		5,403,843	Akimoto, et al	04/04/1995	2 2
		5,284,661	Morimoto, et al	02/08/1994	0 %
		5,817,819	Furuya, et al	10/06/1998	9 1
		5,521,181	Meyer, et al	05/28/1996	2 2
		6,166,019	Meyer, et al	12/26/2000	20 72
		5,334,596	Hartman, et al	08/02/1994	<u> </u>
		4,835,157	Press, et al	05/30/1989	2
		5,792,767	Meyer, et al	08/11/1998	155
					8.
				ļ .	
					:
				- 	
-					
		<u> </u>		 	

	FOREIGN PATENT DOCUMENTS									
Examiner Initials*	Cite No.1	Office ³	Foreign Patent Docum Number ⁴	ent Kind Code ⁵ (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	16		
	,	WO	01/63244 A1		Chen, et al	08/30/2001				
		wo	97/07119		Furuya, et al	02/27/1997				
		wo	98/54116		Castelhano, et al	12/03/1998				
		WO	96/22991		Meyer, et al	08/01/1996				
		wo	95/28405		Furuya, et al	10/26/1995				
		wo	92/20687		Chakravarty, et al	11/26/1992				
		WO	00/61583		Klein, et al	10/19/2000				
		wo	00/04027		Meyer, et al	01/27/2000				
		WO	98/49899		Atherall, et al	11/12/1998				
		EP	0 530 537 B1		Akimoto, et al	01/08/1997				

Examiner	Date	
Signature	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.



Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Substitute for form 1449A/PTO

PTO/SB/08A (08-00)
Approver or use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

PETON

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet	2	of	6
-------	---	----	---

- · · · · · · · · · · · · · · · · · · ·	mpl t if Known
Application Number	10/075,073
Filing Date	February 13, 2002
First Named Inventor	William Glen Harter, et al
Group Art Unit	1645
Examiner Name	Unknown
Attorney Docket Number	A0000428-01-CFP

	U.S. PATENT DOCUMENTS									
Examiner Initials*	Cite No.1	U.S. Paten Number	t Document Kind Code ² (If known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear				
			1			<u> </u>				
						CENTER 150012900				
					ļ	<u> </u>				
						<u> </u>				
						<u> </u>				
						- 8				
						6				
						"				
					<u> </u>					
					· —					
			- 							
	-			`	+					

	FOREIGN PATENT DOCUMENTS									
Examiner Cite '	Office ³	Foreign Patent Document Kind Code ⁵ Office ³ Number ⁴ (if known)		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant	Te .			
		EP	0 443 568 A1		Morimoto, et al	08/28/1991	Figures Appear	\top		
		EP	0 443 568 B1		Morimoto, et al	06/12/1996				
		EP	0 492 316 A1		Akimoto, et al	07/01/1992				
		EP	0 502 725 A2		de Laszlo	09/09/1992				
		EP	0 530 537 A1		Akimoto, et al	03/10/1993				
		EP	0 416 740 A2		Smith, et al	03/13/1991				
		EP	0 297 661 B1		Janssens, et al	09/16/1992				
		EP	0 438 261 A2		Akimoto, et al	07/24/1991				
		EP	0 297 661 A1		Janssens, et al	01/04/1989				
		EP	0 282 133 B1		Janssens, et al	07/28/1993	•			

Examiner	Date	
Signature	Considered	

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.



^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

PTO/SB/08A (08-00)

Approver use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE

STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 3 of 6

Complete if Kn wn					
Application Number	10/075,073				
Filing Date	February 13, 2002				
First Named Inventor	William Glen Harter, et al				
Group Art Unit	1645 1624				
Examiner Name	Unknown				
Attorney Docket Number	A0000428-01-CFP				

U.S. PATENT DOCUI			
Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
			H
	<u> </u>		<u>a</u>
	 		到_
	-		1800/
	 	<u>.</u>	8
· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · ·		188
			ප
	 	· · · · · · · · · · · · · · · · · · ·	
	+		
· · · · · · · · · · · · · · · · · · ·	<u> </u>		
	1		
	1		
	of Cited Document		Of Cited Document

				FORI	EIGN PATENT DOCUMENTS	S		
Examiner Initials*	Cite No.1	Office ³	Foreign Patent Docum Number ⁴	ent Kind Code ⁵ (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T6
		EP	0 282 133 A2		Janssens, et al	09/14/1988		
		ЛР	5-213956		Japanese Language			
		wo	96/24597		Furuya, et al	08/15/1996		
								1
		\vdash	•					+
		\vdash				 		+
		1						1
		\Box						1

	•		
Examiner		Date	
Signature		Considered	

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.



^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Sheet

PTO/SB/08B (08-00)
Approved or use through 10/31/2002. OMB 0651-0031
U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary) 6

	C m	pl_te ⁻ if Known
Ì	Application Number	10/075,073
ļ	Filing Date	February 13, 2002
į	First Named Inventor	William Glen Harter, et al
i	Group Art Unit	-1645 16 2eq
	Examiner Name	Unknown
	Attorney Docket Number	A0000428-01-CFP

		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS	,
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	
		MONTANA, John, et al, "The design of selective non-substrate-based matrix metalloproteinase inhibitors", Current Opinion in Drug Discovery & Development, 2000; 3(4), pp 353-361	Juour
		CLARK, Ian, et al, "Matrix metalloproteinase inhibitors in the treatment of arthritis", Current Opinions in Anti-inflammatory & Immunomodulatory Investigational Drugs, 2000; 2(1), pp 16-25	3
		CHEN, James, et al, "Structure-Based Design of a Novel, Potent, and Selective Inhibitor for MMP-13 Utilizing NMR Spectroscopy and Computer-Aided Molecular Design", J. Am. Chem. Soc., 2000, 122; pp 9648-9654	
		HIROTA, Kosaku, et al, "Synthesis of 6-Substituted Thieno[2,3-d]pyrimidine-2,4(1H,3H)-diones", J. Heterocycl. Chem., 1990; 27(3); pp 717-721	
		RAJAPPA, S., et al, "Synthesis of Thiophenes: Part III* - Further Variations in the Substitution Pattern", Indian J. Chem., Vol. 12, 1974; pp 1-3	
		HCAPLUS Abstract 1998: 542760; "Preparation of bicyclic-substituted hexahydrobenz [e] isoindoles as al adrenergic antagonists"	
		HCAPLUS Abstract 1990: 514925; "Pyrimidines. 65. Synthesis of 6-substituted thieno [2,3-d] pyrimidine-2 4(1H,3H) - diones"	
		HCAPLUS Abstract 1974: 463420: "Synthesis of thiophenes. III. Further variations in the substitution pattern"	
		Derwent Abstract 2000-687031/67, "New xanthine derivatives are inhibitors of cellular processes mediated by interleukin-12 for treating inflammatory responses e.g. chronic inflammatory disease, chronic intestinal inflammation, arthritis, psoriasis and asthma (Eng)"	
,		Derwent Abstract 92-415690/50, "New Pyrimidinone derivs. are angiotensin II antagonists - for treating hypertension, congestive heart failure, renal failure, Alzheimer's disease, amnesia schizophrenia etc (Eng)"	
		Derwent Abstract 92-302020/37, "New fused pyrimidone derivs are angiotensin II antagonists to treat hypertension, congestive heart failure, Alzheimer's disease, amnesia, anxiety, schizophrenia, etc. (Eng)"	

Examiner	Date	
Signature	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

10/075,073

Compl t if Kn wn

PTO/SB/08B (08-00)

Approved or use through 10/31/2002. OMB 0651-0031

U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Number

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

February 13, 2002 Filing Date William Glen Harter, et al **First Named Inventor** 1645 Group Art Unit Unknown **Examiner Name**

(use as many sheets as necessary)

Attorney Docket Number Sheet A0000428-01-CFP 5 6

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	71
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	DữΩ
		Derwent Abstract 91-254180/35, "New angiotensin-II antagonising fused thiophene derivatives - used for treating hypertension and circulatory diseases including heart diseases and stroke"	D Fachtone
		Derwent Abstract 89-192246/26, "New 3-piperidinyl:alkyl-thieno: or furo pyrimidine-2.4-di:one cpds useful as seratonin antagonists and alpha adrenergic blockers"	
		Derwent Abstract 2000-195023/17, "New ipiperazinyl pyrimidine dione derivatives used as selective alpha-1D adrenoceptor antagonists for treating benign prostatic hyperplasia, hypertension, detrusor instability and incontinence (Eng)"	
		Derwent Abstract 2001-158207/16, "New piperazinyl pyrimidine dione derivatives are selective alpha-1D adrenoceptor antagonists used for treatment of e.g. hypertension"	
		Derwent Abstract 96-362624/36, "New bi:cyclic substd. hexa:hydro-benz-isoindole derivs are alpha-1 adrenergic antagonists, used in treatment of benign prostatic hyperplasia (Eng)"	
		Derwent Abstract 89-008928/02, "New bi:cyclic heterocycle substd. hexa-hydro-1H-azepine - and pyrrolidine cpds., have anti-histaminic properties, for treatment of e.g. allergic rhinitis, allergic asthma, etc."	
		Derwent Abstract 88-258874/37, "New 1-alkyl substd. benzimidazole derivs having anti-histaminic activity and used for treating allergic diseases such as allergic asthma"	
		Derwent Abstract 91-216939/30, "New condensed heterocyclic glutemic acid derivs., - active against enzyme using folic acid and antitumour agents for treating e.g. leukemia"	
		Derwent Abstract 99-080786/07, "New thiophene- and pyrrole-based hetero-aromatic compounds - are (ant)agonists of cell surface receptors, useful e.g. for inhibiting unwanted cell growth e.g. due to cancer (Eng.)"	
		Derwent Abstract 97-165234/15, "New thieno-pyrimidine derivs. are endothelin antagonists - useful for treating e.g. acute renal failure, cardiac infarction, liver insufficiency, organ hypo-function and vasoconstriction (Eng)"	
		Derwent Abstract 96-384384/38, "New 2,4(1H, 3H)-di:oxo-5-(aminoalkyl)thieno(2,3-d)-pyrimidine derivs are gonadotropin-releasing hormone antagonistic agents useful in prevention and treatment of sex hormone dependent diseases (Eng)"	

	T	
Examiner	Date	
Signature	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. 2 Applicant is to place a check mark here if English language Translation is attached.

Sheet

U. S. Patent and Trademark Of Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

PTO/SB/08B (08-00)	
use through 10/31/2002. OMB 0651-0031	
CELUS DEPARTMENT OF COMMERCE	

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary) of 6 6

Application Number	10/075,073						
Filing Date	February 13, 2002						
First Named Inventor	William Glen Harter, et al						
Group Art Unit	1645						
Examiner Name	Unknown						
Attorney Docket Number	A0000428-01-CFP						

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	}
Examiner Ihitials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T2
<i>)</i>		Derwent Abstract 95-382760/49, "Fused bicyclics as gonadotropin releasing hormone antagonists - used for treating hormone related cancers, benign prostatic hypertrophy, acne vulgaris, etc. (Eng)" Derwent Abstract 93-299636/38, "New condensed heterocyclic oligo-glutamate derivs used as water	
		Derwent Abstract 93-299636/38, "New condensed heterocyclic oligo-glutamate derivs used as water soluble antitumour agent and have good storage stability in cells"	
		Derwent Abstract 93-078155/10, "New antitumour condensed pyrimidine derivs for treating chorlocarcinoma, leukaemia, breast adenocarcinoma, squamous cell carcinoma, lung cancer, lympho sarcoma, etc. and also rheumatism (Eng)"	
		Derwent Abstract 92-218561/27, "Antitumoural condensed heterocyclic oligo:glutamate derivs for treating leukaemia, squamous cell carcinoma, lymphatic sarcoma, small cell cancer of the lung etc. (Eng)"	
		Derwent Abstract 96-267825/27, "New hexa:hydro benz(e)isoindole cpds are useful in treatment of benign prostatic hyperplasia (Eng)"	
		Derwent Abstract 94-248420/30, "Furano- and thieno- (3,2-c)piperidone carboxamido-acids - are fibrinogen receptor antagonists, inhibit blood platelet aggregation, used in thrombi and emboli treatment:	
		Derwent Abstract 91-075241/11, "Heterocyclic peptide derivs. useful as renin inhibitors - in the treatment of hypertension, congestive heart failure, retro-viral diseases and central nervous system disorders"	
		HCAPLUS Abstract 1996:580284: "Preparation of heterocyclyl-substituted benz[3]isoindoles as x1 adrenergic antagonists"	
:			

1						
ı	Examiner		l	Date		
l	Signature			Considered	1	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.